

REMARKS

Claim 5 has been amended to more clearly describe the present invention.

Claims 1-2, 5-6, and 13 stand rejected under 35 U.S.C. 102(e) as being anticipated by Ryonai et al. (U.S. Patent No. 6,242,085). Applicant respectfully traverses this rejection because the cited reference does not disclose (or suggest) a granular underlayer formed on a substrate.

Ryonai is directed to a magnetic recording medium and method for producing the same. As shown in FIG. 1, an underlying layer 2 is formed on a glass substrate 1. A magnetic layer 3 is formed on the underlying layer 2. Ryonai, however, does not disclose (or suggest) a granular underlayer formed on the substrate, as now recited in amended independent claims 1 and 2.

The present application discloses that the growth of magnetic grains is controllable by adding an oxide or nitride to a magnetic substance. As a result, the problem of magnetic grains becoming too large in a deposition by epitaxial growth of the magnetic grains on a fine-grained underlayer is overcome. The effect of the present invention is shown in FIG. 5, as the rise in S/Nm, and as described on page 13, line 24 to page 14, line 19. Since Ryonai does not disclose (or suggest) a granular underlayer that is formed on a substrate, withdrawal of the rejection is respectfully requested.

Claims 1-3, 5-6, and 13 stand rejected under 35 U.S.C. 102(e) as being anticipated by Sakawaki et al. (U.S. Pub. No. 2002/0160234). Applicant respectfully

traverses this rejection for the reasons recited above with respect to the §102 rejection based on Ryonai.

Sakawaki is directed to a magnetic recording medium that includes a non-magnetic substrate 1 as shown in FIG. 1. An orientation-determining layer 2 is formed on the substrate 1, and a non-magnetic undercoat layer 3 and a magnetic layer 4 are formed on the orientation-determining layer 2.

Sakawaki discloses in paragraph [0107] that magnetic films 4a and 4b which form a part of the magnetic layer 4 may be a granular film in which magnetic grains are dispersed in a non-magnetic matrix such as a non-magnetic metal. Sakawaki does not disclose formation of a granular underlayer. Rather, since the magnetic layer 4 has a structure in which antiferromagnetic bonding is formed between a plurality of magnetic film, an intermediate film 4c needs to be provided between the magnetic films 4a and 4b (see paragraphs [0103] and [0104]).

In the present invention a granular underlayer is formed on the substrate, unlike in Sakawaki, and no intermediate film is required in the present invention, unlike in Sakawaki. Therefore, the above-mentioned problem of the magnetic grains becoming too large during deposition by too much epitaxial growth of magnetic grains is overcome. For these reasons, withdrawal of the rejection is respectfully requested.

Claim 4 stands rejected under 35 U.S.C. §103(a). Applicant respectfully traverses this rejection for the reasons given above traversing the rejections of claim 1, from which claim 4 depends, and because of the additional features recited in claim 4.

For all of the foregoing reasons, Applicant submits that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

October 13, 2004
300 South Wacker Drive, Suite 2500
Chicago, Illinois 60606
(312) 360-0080
Customer No. 24978

By:



B. Joe Kim

Registration No. 41,895